

AFAD

Automated Flagger Assistance Device



Types of approval for AFADs in North Carolina

- **Trial Use** means the device may be used in North Carolina on a project by project basis.
- The device will have to be approved by the NCDOT Engineer supervising the project and the Work Zone Traffic Control Unit. It will be your responsibility to seek approval from this office for locations your product will be used so we can monitor its performance.

Types of approval for AFADs in North Carolina

- **Conditional Approval** status means the product will be added to the Approved Products List for the North Carolina Department of Transportation.
- However, as the Work Zone Traffic Control Unit finalizes the specification for automated flagger assistance devices, the product may be required to meet new requirements to continue its "Conditional Approval" status. Once the specification is finalized, your product will be reviewed and determined whether it will be placed on an "Approved for Use" status.

Types of approval for AFADs in North Carolina

- **Approved for Use** status means the above mentioned product will be added to the Work Zone Traffic Control Unit's Approved Products List for the North Carolina Department of Transportation.
- However, if problems arise at any time, the product will be removed from the Approved Products List pending further review.

AFADs Currently Approved

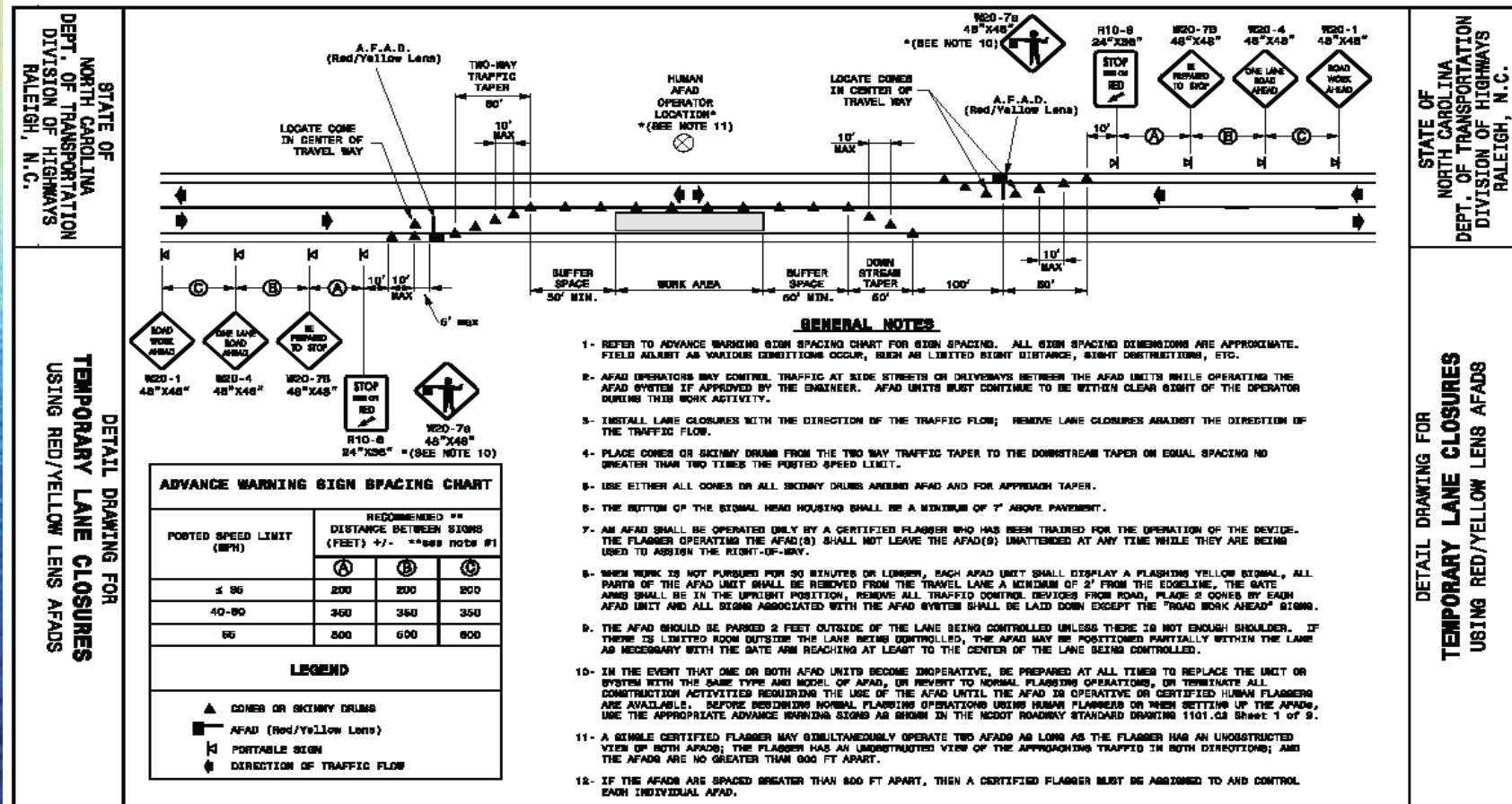


Wanco Inc.
RoboFlagger
Approval: **Trial Use**



Synergy Technology,
AF100
Approval: **Conditional**

AFAD Traffic Control Standard Drawing



ADVANCE WARNING SIGN SPACING CHART			
POSTED SPEED LIMIT (MPH)	RECOMMENDED ** DISTANCE BETWEEN SIGNS (FEET) +/- **SEE NOTE #1		
	(A)	(B)	(C)
≤ 36	200	200	200
40-50	350	350	350
55	500	600	800

LEGEND	
▲	CONES OR SKIMMY DRUMS
■	AFAD (Red/Yellow Lens)
⏏	PORTABLE SIGN
→	DIRECTION OF TRAFFIC FLOW

- GENERAL NOTES**
- REFER TO ADVANCE WARNING SIGN SPACING CHART FOR SIGN SPACING. ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE. FIELD ADJUST AS VARIOUS CONDITIONS OCCUR, SUCH AS LIMITED SIGHT DISTANCE, SIGHT OBSTRUCTIONS, ETC.
 - AFAD OPERATORS MAY CONTROL TRAFFIC AT SIDE STREETS OR DRIVEWAYS BETWEEN THE AFAD UNITS WHILE OPERATING THE AFAD SYSTEM IF APPROVED BY THE ENGINEER. AFAD UNITS MUST CONTINUE TO BE WITHIN CLEAR SIGHT OF THE OPERATOR DURING THIS WORK ACTIVITY.
 - INSTALL LANE CLOSURES WITH THE DIRECTION OF THE TRAFFIC FLOW; REMOVE LANE CLOSURES AGAINST THE DIRECTION OF THE TRAFFIC FLOW.
 - PLACE CONES OR SKIMMY DRUMS FROM THE TWO WAY TRAFFIC TAPER TO THE DOWNSTREAM TAPER ON EQUAL SPACING NO GREATER THAN TWO TIMES THE POSTED SPEED LIMIT.
 - USE EITHER ALL CONES OR ALL SKIMMY DRUMS AROUND AFAD AND FOR APPROACH TAPER.
 - THE BOTTOM OF THE SIGNAL HEAD HOUSING SHALL BE A MINIMUM OF 7" ABOVE PAVEMENT.
 - AN AFAD SHALL BE OPERATED ONLY BY A CERTIFIED FLAGGER WHO HAS BEEN TRAINED FOR THE OPERATION OF THE DEVICE. THE FLAGGER OPERATING THE AFAD(S) SHALL NOT LEAVE THE AFAD(S) UNATTENDED AT ANY TIME WHILE THEY ARE BEING USED TO AID IN THE RIGHT-OF-WAY.
 - WHEN WORK IS NOT PURSUED FOR 30 MINUTES OR LONGER, EACH AFAD UNIT SHALL DISPLAY A FLASHING YELLOW SIGNAL. ALL PARTS OF THE AFAD UNIT SHALL BE REMOVED FROM THE TRAVEL LANE A MINIMUM OF 2' FROM THE EDGE LINE. THE GATE ARMS SHALL BE IN THE UPRIGHT POSITION, REMOVE ALL TRAFFIC CONTROL DEVICES FROM ROAD, PLACE 2 CONES BY EACH AFAD UNIT AND ALL SIGNS ASSOCIATED WITH THE AFAD SYSTEM SHALL BE LAID DOWN EXCEPT THE "ROAD WORK AHEAD" SIGNS.
 - THE AFAD SHOULD BE PARKED 2 FEET OUTSIDE OF THE LANE BEING CONTROLLED UNLESS THERE IS NOT ENOUGH SHOULDER. IF THERE IS LIMITED ROOM OUTSIDE THE LANE BEING CONTROLLED, THE AFAD MAY BE POSITIONED PARTIALLY WITHIN THE LANE AS NECESSARY WITH THE GATE ARM REACHING AT LEAST TO THE CENTER OF THE LANE BEING CONTROLLED.
 - IN THE EVENT THAT ONE OR BOTH AFAD UNITS BECOME INOPERATIVE, BE PREPARED AT ALL TIMES TO REPLACE THE UNIT OR SYSTEM WITH THE SAME TYPE AND MODEL OF AFAD, OR REVERT TO NORMAL FLAGGING OPERATIONS, OR TERMINATE ALL CONSTRUCTION ACTIVITIES REQUIRING THE USE OF THE AFAD UNTIL THE AFAD IS OPERATIVE OR CERTIFIED HUMAN FLAGGERS ARE AVAILABLE. BEFORE RESUMING NORMAL FLAGGING OPERATIONS USING HUMAN FLAGGERS OR WHEN SETTING UP THE AFADS, USE THE APPROPRIATE ADVANCE WARNING SIGNS AS SHOWN IN THE MCDOT ROADWAY STANDARD DRAWING 1101.02 Sheet 1 of 3.
 - A SINGLE CERTIFIED FLAGGER MAY SIMULTANEOUSLY OPERATE TWO AFADS AS LONG AS THE FLAGGER HAS AN UNOBSTRUCTED VIEW OF BOTH AFADS; THE FLAGGER HAS AN UNOBSTRUCTED VIEW OF THE APPROACHING TRAFFIC IN BOTH DIRECTIONS; AND THE AFADS ARE NO GREATER THAN 900 FT APART.
 - IF THE AFADS ARE SPACED GREATER THAN 800 FT APART, THEN A CERTIFIED FLAGGER MUST BE ASSIGNED TO AND CONTROL EACH INDIVIDUAL AFAD.











ANY QUESTIONS
on
AFADs